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P 265
1890/1891 m
ANNUAL MESSAGE

OF

See page 7
are the bonds
mortgage

CHAS. M. HOWE,

Mayor of the City of Passaic.

1891.

PASSAIC, N. J.
PASSAIC DAILY NEWS PRINT.
1891.



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CITY OFFICERS.

MAYOR.

CHARLES M. HOWE.

PRESIDENT OF THE CITY COUNCIL.

THOMAS R. WATSON.

CITY CLERK.

FRANCIS C. COGAN.

SUPERINTENDENT OF STREETS.

FRANK KASTELL.

CITY SURVEYOR.

COLIN R. WISE.

CITY COUNSEL.

GEORGE P. RUST.

CITY TREASURER.

JOHN J. SLATER.

COUNCILMEN.

FIRST WARD

TIMOTHY HAGERTY,
EDWARD HOGAN,
MARTIN COSTELLO.

SECOND WARD

THOMAS R. WATSON,
GEORGE F. SWAIN,
JAMES H. ROSCOE.

THIRD WARD

JOHN A. HEGEMAN,
BIRD W. SPENCER,
WILLIAM L. CLARK.

FOURTH WARD

CHRISTIAN HUBER,
WILLIAM RUSHMER,
WILLIAM H. LORD.

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STANDING COMMITTEES. 1890-91.

FINANCE.—George F. Swain, William L. Clark, William Rushmer.

AUDIT.—John A. Hegeman, Christian Huber, Martin Costello.

STREETS & ASSESSMENTS.—Christian Huber, Edward Hogan, William L. Clark.

CITY HALL, HYDRANTS & FIRE DEPARTMENT.—Thos. R. Watson, Christian Huber, Timothy Hagerty.

STREET LAMPS.—Edward Hogan, William L. Clark, William H. Lord.

POLICE.—William H. Lord, James H. Roscoe, John A. Hegeman.

PRINTING & STATIONERY.—James H. Roscoe, William H. Lord, Martin Costello.

ORDINANCES.—William Rushmer, Bird W. Spencer, Edward Hogan.

SALARIES & OFFICERS.—Martin Costello, John A. Hegeman, James H. Roscoe.

POOR.—John A. Hegeman, William H. Lord, Martin Costello.

JUDICIARY.—William L. Clark, William Rushmer, James H. Roscoe.

BUILDINGS.—Bird W. Spencer, Christian Huber, William Rushmer.

LICENSE.—William Rushmer, Edward Hogan, Bird W. Spencer.

SEWERS.—Christian Huber, William L. Clark, William Rushmer.

FREE PUBLIC LIBRARY.—Bird W. Spencer, Timothy Hagerty, George F. Swain.

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1890/91

MAYOR'S MESSAGE.

PASSAIC, N. J., January 5th, 1891.

To the Hon. City Council of the City of Passaic :

GENTLEMEN :—As required by the City Charter, I herewith submit this, being my 4th Annual Message, as Mayor of Passaic.

The year that has just closed has been a most important one in our history. By the recent census, our increased population enables us to pass now from a city of the 3rd to be a city of the 2nd class. Also the work done in our new water supply, and the building of our system of sewers, will place us in the front rank, as one of the most healthful and desirable cities of our State. Furthermore, it is with pleasure I note the fact, that our tax rate is somewhat reduced this year. This is creditable to all concerned. As city officials our duty should be, to run the city in an economical and just manner.

In treating of the various topics to be considered, I have taken the liberty of repeating a few of my previous recommendations, which as yet have not received your action, believing them to be for the welfare of the city.

Reviewing the past year as a whole, and seeing our present prosperous and healthy condition, we have unusual cause for gratitude to God, for the blessings he has bestowed upon us.

FINANCES.

The finances of the city are in good condition. For the first time, I believe, in our history, we have not had any notes discounted. This is owing, however, in part to the results of the Martin Act Commissioners, and taxes and assessments being paid this year that were long over due. Up to the present time there have been collected \$28,538.91 of adjusted taxes and assessments. Before another year closes, these Commissioners will doubtless finish their work, and our correct financial condition will be known.

The regular bonded debt of the city has been decreased \$5,000.00. The city has incurred a new debt, however, in the shape of \$33,000.00 Park bonds, while on the other hand they have received donations amounting to \$10,000, to be used in completing the unfinished building situated on this Park; as to considering the question of what use to make of this Castle property, so called, it is a matter that should receive the careful, and unbiased consideration of your Board. The future growth and development of the city should be considered, as well as our present necessity. I would recommend, however, that whatever should be decided upon, no more than the \$10,000 contributed for that purpose, shall be expended this coming year. The building of our sewers at present, will cause increased city taxes and assessments to be levied, and will, I believe, be all our tax payers should justly be called upon to pay. Therefore, any and every extra expense that can be avoided, should be deferred until such taxes as our sewer assessments are paid or provided for. I present herewith the full statement of assets and liabilities as prepared by the City Treasurer and Collector of Taxes.

ASSETS.

Uncollected Taxes, 1890.....	\$53,087 57	
" " prior to 1890.....	55,990 29	
	<hr/>	\$109,077 86
Uncollected street assessments (as per detailed state- ment on page 17).....		35,181 75
Anticipated assessments on property for which cer- tificates of improvement have been issued.....		56,160 00
State School Fund, 1890.....		13,107 09
School buildings and grounds, valuation 1882.....	44,500 00	
Third Ward School, cost with improvements to date.	7,000 00	
Fourth Ward School, cost including furniture.....	11,700 00	
New High School, cost including furniture.....	40,000 00	
	<hr/>	103,200 00
Public Park and Castle.....		33,000 00
City Hall, valuation 1881.....	10,000 00	
Lock Up.....	2,000 00	
	<hr/>	12,000 00
Fire Apparatus, valuation 1888.....	19,000 00	
Fire Department Buildings.....	9,000 00	
Gamewell Fire Alarm.....	5,000 00	
Bell Tower Bell.....	986 00	
	<hr/>	33,986 00
Mortgage on Real Estate, Washington Place.....		500 00

Furniture, Safes, Etc.....		2,600 00
Cash in Passaic National Bank.....	14,596 15	
Cash in the State Trust and Safe Deposit Co.....	14,582 03	
	<hr/>	29,178 18
Total Assets.....		<hr/> \$427,990 88

LIABILITIES.

Five per cent. City of Passaic Bonds, July 1st, 1894..	\$20,000 00	✓
Five per cent. City of Passaic Bonds, June 1st, 1895..	24,000 00	✓
Five per cent. City of Passaic Bonds, Jan. 2nd, 1902..	23,500 00	✓
Seven per cent. City of Passaic Bonds, Nov. 1st, 1896..	25,000 00	✓
	<hr/>	92,500 00
Five per cent Public Park Bonds, due 1905-1915.....		33,000 00
Five per cent. Renewal Street Improvement Bonds, due 1891-1897.....	10,500 00	
Five per cent. Renewal Street Improvement Bonds, due May 1st, 1892.....	21,000 00	
	<hr/>	31,500 00
Seven per cent. Public School Bonds, due 1891-1893..	3,000 00	
Five per cent. School House Bonds, due 1891-1894...	6,000 00	
Five per cent. School House Bonds, due 1891-1906...	22,000 00	
Five per cent. School House Bonds, due 1891-1898...	8,000 00	
	<hr/>	39,000 00
Total Mortgage Bonds.....		<hr/> \$196,000 00
Bonds issued on account of Ayerigg Avenue opening.	320 04	
Bonds issued on account of a street in the Second Ward, Erie Street.....	498 38	
Bonds issued on account Park Avenue opening.....	1,589 22	
	<hr/>	2,407 64
Improvement certificates outstanding.....		67,449 65
Amount of Appropriations unexpended.....		61,827 89
Citizen's subscription to fund "to be expended in pre- serving and improving" Paulison Castle.....	\$10,000 00	
Less amount still unpaid.....	1,325 00	
	<hr/>	8,675 00
Total Liabilities.....		<hr/> 336,360 18
Excess of Assets over Liabilities....		<hr/> 91,630 70
		<hr/> \$427,990 88

I submit the statement made last year, bringing it up to date, setting forth the assessed valuations, bonded indebtedness and percentage of indebtedness for the past ten years, from which it will

be seen that our per centage of indebtedness is a little higher than last year, on account of the Park Bonds.

March 1, 1882,	\$2,958,520	\$162,800	0550
“ “ 1883,	3,028,615	158,500	0526
“ “ 1884,	3,167,405	155,500	0490
“ “ 1885,	3,276,870	157,500	0474
“ “ 1886,	3,276,170	163,000	0497
“ “ 1887,	3,336,520	182,500	0547
Jan'y “ 1888,	3,470,360	167,000	0481
“ “ 1889,	3,875,690	173,000	0446
“ “ 1890,	4,006,717	168,000	0424
“ “ 1891,	4,464,315	196,000	0439

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STREETS.

Very little work has been done on our streets this year, excepting the usual repairs from wash outs, and constructing crosswalks, etc. The digging up of so many streets and avenues for building sewers, has kept them necessarily in a bad condition. As soon as these sewers are laid, I would recommend all streets that have had the McAdam dug up, be repaired with a top dressing of broken stone. The crosswalks of the city and especially those of the business streets should be kept clean from mud and snow. This work at present has been very imperfectly done. I would recommend the passage of an ordinance or resolution more specially defining the duties of the Street Superintendent in this regard. Also I recommend the placing of signs, either on the lamp posts or otherwise, on all the street corners of the city, giving names of streets and avenues.

It is with pleasure I note the fact of the passage of an ordinance, as recommended in my last Annual Message, for the laying of a curb and gutter on the Easterly side of Main avenue, where the Erie switch now stands, but for some reason nothing further has been done. I would recommend therefore, that the contract for doing this work be given out at once, as it is an imposition on our citizens, and a disgrace to the city, to allow our Main street to remain longer in the shape it now is. This curb and gutter being laid, I am informed that the county will construct a McAdam roadway for us, which, in my opinion, will be all that is needed for some years. I desire to call your especial attention, to the manner in which the streets are being repaired with broken limestone by the city. Experience, here as well as elsewhere, has shown that it is unwise to cover the stones with clay, as the stones

do not bind together as well, and only makes a muddy roadway. I recommend that in all repairs to be made, very little or no clay be used. As an example of the durability and cleanliness of a street built in such a manner, I would refer you to Passaic avenue between Prospect street and Main avenue.

SEWERS.

The building of sewers and work connected therewith, has been the principal business of the year. The large surface water sewer built on Main avenue and now nearly completed, has already proved of great value. Contracts have been awarded, and work is being done, in constructing house sewerage in various parts of the city. I believe the building of these sewers, will mark for us an era of unusual prosperity. With our natural advantages as to location, pure water and our system of sewerage completed, we can offer advantages equal, if not superior to any neighboring city. I would recommend our citizens generally to lay down the lateral connections from sewers to their houses promptly, so that the streets will not need to be dug up again after the McAdam is repaired. The City Surveyor, upon my request, has prepared a detail statement, which is added hereto, showing length of sewers, cost and much other valuable information concerning the streets and sewers.

FIRE DEPARTMENT.

Our fire department remains about the same as last year, and is in a creditable condition. The firemen have shown that they can be depended upon, and willingly respond when called to action. During the year, the fires have been very few, and with the exception of the one destroying the Baptist Church and the Passaic street fire, have done little damage. I believe, however, the time has come when a few radical changes should be made in our fire department.

In my opinion, the department is at present entirely too large. That is, we have many men now on the rolls that do no fire duty whatever; in fact, they are a dead weight. All they do is to receive an exemption on a valuation of \$500 from the city taxes, and render no services as an equivalent. At present, we have six companies composed of 264 firemen. I believe the number should be reduced to at least four, and these four companies, should be

composed of not more than 35 or 40 men each, and only those who are willing to actually do fire duty. Then, in addition, arrangements should be made to have two teams of horses and drivers, that could be subject to call night and day, to pull one steamer and one truck company. As we are at present, too much time is lost in getting to the fires. I am informed that arrangements can be made with a reliable firm, to keep horses and drivers ready for use on very favorable terms. The city, by reducing the size and number of the present fire department, could pay for the above teams, and be under less expense than we are now, and the department would do better service. I trust the City Council will give attention to this matter, and take such action as they may deem proper.

I regret that no definite action has as yet been taken concerning fire escapes, as recommended by me a year ago. I therefore must again call your attention to this subject, and recommend the necessity of passing an ordinance regulating the construction of proper fire escapes on all factories and tenement houses. We should take warning by the experience of other cities, and not wait until we have had a large fire and possible loss of life, but should act promptly.

I also recommend the consideration of the subject of establishing fire limits, within which no frame buildings shall be erected. This at present to apply to our principal business streets and immediate surroundings, and to be extended as needed.

SCHOOLS.

Our public schools are a credit to the city, and I believe, are managed in a conservative and business like manner.

The new Fourth Ward school house has been completed and is now in successful operation and is fully appreciated by those residing in its vicinity. This year, for the first time, an appropriation has been made by the city for manual training, and by this means we have secured an extra allowance of \$500 from the State. Manual training has been found to be of great benefit in other cities, and doubtless will be here when in more complete working order. The night school is in operation again, and is being well attended. I recommend liberal measures in support of our public school.

POLICE.

Our police force has been increased by the appointment of one extra patrolman, and one truant officer. Although we have had a large number of foreign workmen in the city, some of whom cannot speak or understand our language, still the general peace and good order of the city has been well maintained, and for this our police deserve credit. Complaints have been recently received, however, from the "Law and Order Society" of our city concerning violations of the Excise law as to liquor selling on Sunday. These complaints were made not so much to bring any special suit against the saloon keepers, but to more especially call attention to the fact that the police were not doing their full duty.

The question naturally arises, that if our citizens can and do notice violations of this law, why is it that our police, who are employed to enforce all the laws, cannot or will not see the same thing. There is no doubt but what the police are derelict in their duty in this regard, although their attention has been called to the subject at various times through the year. Inasmuch as the City Charter makes the Mayor the chief executive officer, and looks to him for the proper enforcement of the city ordinances, I think it only proper, that he should be invested with sufficient power to be able to carry the laws into effect. This he cannot do while the present police ordinance remains in force. I therefore recommend that the police ordinance be so amended, so to give the Mayor the power of removal or suspension in case of inefficiency or neglect of duty, in any of its policemen. The Mayor can then be properly held responsible, for the enforcement of all the laws.

Complaints have also been received from the teachers, concerning the truant officer, that he does not give proper time to his duties.

I believe it will be for the best interest of the city, to repeal the ordinance under which said truant officer was appointed, and then appoint one additional policeman on our regular force. One of these men could be detailed for duty as a truant officer, and give all the time necessary for this work, and could also be on regular duty on Sundays, holidays and during the summer vacation.

The number of arrests during the year have been 384, this being 14 more than last year, and they have been disposed of as follows :

Fined,	-	-	-	-	176
Held for Grand Jury,	-	-	-	-	80
Committed to County Jail,	-	-	-	-	37
Discharged,	-	-	-	-	91

There has been collected or is due from this de-			
partment for serving warrants,	-		\$190.40
From Police Justices, for fines,	-	-	733.95
			<hr/>
Total,	-	-	\$924.35

WATER.

During the year, the Acquackanonk Water Company have complied with their contract with the city, in so far that they have laid down large iron water pipes, and are now furnishing us with pure water, taken from above the Passaic Falls at Paterson. This water supply, I believe, is duly appreciated by all our citizens. The pressure, however, is not as yet what it should be, and it is to be hoped that this defect will soon be overcome.

STREET LIGHTING.

The streets of the city are for the most part well lighted with gas and electric lights. The old gasoline lamps are properly all done away with. I notice the City Council, however, at almost every meeting are increasing the street lights. Many of these are, I think, uncalled for and the city, as a result, is incurring a larger expense for this purpose than need be. Passing these orders for new lights, for one or more at any meeting the Council, I fear, do not realize how rapidly the total number of lights is increased. Extra lights have been ordered as follows :

- 10 Arc lights at \$114 each per annum.
- 13 Incandescent lights at \$17 each per annum.
- 9 Gas lights at \$28 each per annum.

From this it appears the expenses for street lighting has been increased during this year, about \$1,600 higher than last year.

Some of the lights ordered are placed beyond where any of our citizens are living, and I consider it an imposition on our tax payers, to increase the running expenses of the city in this manner. To avoid such action hereafter, I would recommend that all extra lights needed, be ordered at one time, at the beginning of each year.

LICENSE.

The Board of Excise Commissioners granted this past year forty retail licenses at \$159 each, and five wholesale at \$200 each, this being a decrease of one license from those issued the previous year. In justice to the Excise Board, I note the fact, that they have this year paid attention to protests from parties interested or living in the neighborhood, and have declined to grant a few of the licenses applied for.

On the other hand, I must refer to the fact, that the Commissioners have during the year, openly violated one of their own ordinances and have, in this particular, set a bad example to parties who have obtained licenses. It is hardly to be expected, that others will respect a law that the Commissioners themselves violate.

I again recommend that on account of the great demand for licenses, and the power that is placed upon the Excise Board by law, the license fee should be raised higher than it is now.

POOR.

No change has been made in the system of providing for the poor. The present plan of hiring rooms, in the places and locations offered is very bad, and it is not creditable to the city. I therefore would again recommend that some measures be taken as soon as practicable, to buy a suitable plot of ground and have land enough around it for those who may be able to work. The amount now paid for renting apartments, will pay the interest at five per cent. on an amount more than sufficient to purchase the property.

ASSESSMENT MAPS.

Let me again urge upon you the necessity of having new assessment maps for the city. It is a great mistake, to allow the matter to drag along in this manner and have nothing done. Much of the property is assessed now, entirely different from the old map numbers, and large plots are divided into lots and streets, completely opposite from the City Maps. Especially would I call your attention to the Fourth Ward. A Map was ordered some years ago but it is not completed, and property is being assessed in a very loose manner in consequence. As stated by me in a former message I believe the city is now losing much more on taxable property, than would soon compensate for the expense of this revis-

ion, and would doubtless be saved from future litigation. I recommend this matter receive prompt action.

ELECTRIC RAILROAD.

A great improvement has been made in the city, by the establishing and running of electric cars, through our principal business streets. While the car tracks are to a certain degree objectionable, yet, taken as a whole, I believe the general public fully appreciate the advantages of the street car line. Upon referring to the city ordinance, granting the right of way to this company, I find that the cars were to run on fifteen minute headway, and were to pay a fee of \$5 per year, for each car used.

In both of these regards, the company have not as yet, lived up to the provisions of the ordinance. Cars should now be run as often as called for in the ordinance.

And I recommend that the Legal Adviser, be requested to notify the company to this effect at once. Also I would recommend that an ordinance be drawn concerning the payment of \$5 due on each car, containing the following provisions, viz: That the company be required to pay the amount due per car, at the beginning of each year, and receive a certificate or license therefor duly signed by the City Clerk, which certificate shall be posted in each car.

TAXES.

In order that the general public may know just who have paid their taxes, and also as an incentive to all to pay promptly, I would recommend hereafter, that the Collector be requested to have published in one of our newspapers, a full list of all delinquent taxpayers, on and after the first of January in each year. This has been tried in other cities with good effect.

HEALTH.

The Registrar's report is as follows :

	1890.	1889.	DECREASE.	INCREASE.
Births, -	345	323		22
Marriages, -	100	92		8
Deaths, -	282	223		59

In closing, I desire to congratulate the City Council on the

labors performed through the year, and for their general attention to city business. I feel safe in stating that more business has been transacted than ever in any previous year. I wish also to thank the City Council and all the city officers, for their co-operation in administering the city government.

Very respectfully,

CHARLES M. HOWE,

Mayor.

Unpaid Taxes, January 1st, 1891.

1871	.	.	.	785.48
1872	.	.	.	886.88
1873	.	.	.	2523.18
1874	.	.	.	1885.97
1875	.	.	.	2388.04
1876	.	.	.	1910.42
1877	.	.	.	2214.62
1878	.	.	.	1376.63
1879	.	.	.	1127.57
1880	.	.	.	1349.66
1881	.	.	.	1091.73
1882	.	.	.	920.36
1883	.	.	.	1905.59
1884	.	.	.	1524.93
1885	.	.	.	2819.88
1886	.	.	.	2954.15
1887	.	.	.	4016.83
1888	.	.	.	4707.23
1889	.	.	.	19601.14
1890	.	.	.	53087.57

\$109,077.86

72688
36389

ASSESSMENTS.

Gregory Avenue, March 13, '71	\$1009.73
Paulison " April 14, '71	460.90
Union " Jan. 15, '72	340.50
Lincoln street, " 29 '72	1.25
Bloomfield Avenue, Jan. 28, '74	204.12
Third street, October 28, '74	33.97
Brook Avenue, January 4, '75	217.08
Oak street, January 18, '75	2347.28
Second street, February 26, '75	17.94
Chestnut " November 16, '74	324.72
Washington Place, Oct. 12, '74	12.27
Linden street, Nov. 25, '78	45.41
Lafayette Avenue, Aug. 13, '79	5401.69
Main Avenue, Nov. 3, '79	1694.36
Passaic street, Ext. Oct. 18, '80	164.62
River Road, Aug. 15, '81	3431.37
Lexington Ave., January 16, '82	1126.18
River Road, July 25, '84	30.66
Main Avenue, Nov. 17, '84	511.53
Howe Avenue, Jan. 19, '85	28.51
Passaic " " "	45.76
Bloomfield Avenue, June 22, '85	255.30
Main " Sept. 21, '85	204.50
Columbia " June 16, '86	87.73
Prospect street, " " "	141.69
Linden " Oct. 4, '86	70.10
Columbia Avenue, " " "	365.08
State street " " "	158.20
Main Avenue, Oct. 18, '86	1922.78
Harrison street, Feb. 23, '87	94.11
First " " " "	52.67
Gregory Avenue, " " "	786.98
Ann street, Feb. 23, '87	204.96
High " April 16, '87	242.97
Paulison Avenue, Aug. 15, '87	323.38.
Third street, " " "	57.00

Jefferson street, Sept, 9, '87	\$38.04
Westervelt Place, Oct. 3, "	1524.34
Hamilton Avenue, " " "	664.30
Van Houten " " " "	69.02
Washington Place, Oct. 3, '87	59.12
Pennington Ave., Oct. 17, '87	694.98
Pennington " Nov. 20, "	49.34
East Main " Dec. 5, "	1855.06
Passaic street Ext. Oct. 19, "	6.11
Madison street, Jan. 16, '88	328.13
Second " April 2, "	554.90
Paulison Avenue, May 7, "	789.41
State street, May 21, '88	137.96
East Main street, May 21, '88	57.64
Passaic street, Oct. 1, '88	31.35
Mercer " Jan. 17, '89	55.54
Jefferson " July 15, "	597.34
A street in the Second Ward, Oct. 7, '89	777.08
Third street, May 5, '90	159.43
Brook Avenue, May 5, '90	839.16
Essex street, Sept. 3, "	127.76
Fourth street, Oct. 6, "	615.64
Lexington Avenue, Oct. 20, '90	139.92
Pennington " Nov. 5, '90	750.07
Park Avenue, Dec. 1, '90	1852.81

\$35,181.75

Report of the City Surveyor.

{ OFFICE OF THE CITY SURVEYOR,
{ PASSAIC, N. J., JAN. 1ST, 1891.

HON. CHAS. M. HOWE, MAYOR, ETC.

SIR :—

In compliance with your request, I hereby submit the following report, of the operations of this department for the year ending Dec. 31st, 1890, comprising the character and extent of the various public improvements, undertaken during the year, and in addition thereto certain other information of a statistical nature relating to matter of general interest.

STREETS AND AVENUES.

The total length of streets and avenues opened, and accepted, within the city limits on January 1st last was 31 1-10 miles. Five and one-tenth miles were macadamized; three-tenths of a mile were paved with trap blocks, and of the remainder nineteen and one-tenth miles were graded and curbed. There were twenty and one-half miles of shade trees. During the year just ended a number of important streets and avenues were graded, curbed, guttered and flagged, and over a mile of additional macadam was put down. A contract was made for the grading, etc. of Sherman Street and this was almost finished, when winter set in and stopped the work. A number of streets and avenues were opened and graded by the owners of adjoining property without expense to the city. Exhibits "A" and "A 1" show these improvements in detail.

ORDINANCE RELATING TO STREETS, ETC.

That portion of the new ordinance relating to streets, and particularly to sidewalks, and the specification defining the form of cross section of the street, the materials of which the sidewalks and gutters are to be composed, and the methods of laying the flagging, setting the curb and paving, gutter, etc., are now understood by the contractors, and greater uniformity in the appear-

ance of the streets and sidewalks would result if all curbing and gutter and all flagging were done by public contract instead of a portion of same being done by private contract, for then better inspection of the material and the manner of laying would be had, than is possible when property owners lay their own curb, gutter and flagging, and in the end it would be much more economical.

MONUMENTS IN PUBLIC PARKS.

At the request of the Committee of the Council on Buildings I recently caused stone monuments to be placed at all important corners of the new property lately acquired by the City—Paulison Park.

Below will be found exhibits "A" and "A 1" giving the lengths, etc., of streets and avenues improved during the year 1890.

"A 1" being an exhibit of work done by individual owners, is incomplete, as the proper information was not at hand at the time of making this report.

Very respectfully,

COLIN R. WISE.

EXHIBIT "A"

Lineal feet of streets or avenues improved during the year 1890, by the City.

NAME OF STREET.	BETWEEN	AND	LENGTH OF STREET.	WIDTH OF STREET.	GRADING LINEAL FEET.	Curb and Gutter, Lineal Ft.	Flagging Lineal Ft.	OPENED.	NAME OF CONTRACTOR.
Ayrigg Ave.	Bloomfield Ave.	River Drive.	4750.00 lin. ft.	72 ft.	4750	2835	2626.5	.....	Patrick McGuire.
Brook Ave.	Passaic Ave.	River Drive.	4400.00 "	66 "	4400	.....	.....	.....	Joseph Adams.
Boulevard.	Bloomfield Ave.	Erie St.	3700.00 "	70 ft. ch'd f'm 90	.....	.....	.....	.....	.....
Essex St.	First St.	Fourth St.	720.00 "	50 ft.	720	805	.....	.....	Edward Dundas.
Erie St.	Prospect St.	Gregory Ave.	520.00 "	40 "	520	1061	501	.....	H. C. N. Johnston.
Fourth St.	South St.	Essex St.	847.00 "	60 "	847	836	809	.....	Patrick McGuire.
Harrison St.	Hope Ave.	Parker Ave.	525.70 "	68 "	.....	.....	525.7	.....	H. C. N. Johnston
Hamilton Ave.	Monroe St.	Lexington Ave.	1250.00 "	66 "	1250	2077	2025.5	.....	H. C. N. Johnston
Lexington Ave.	Summer St.	City Limits.	804.00 "	75 and 80	804	.....	.....	475.27 lin. ft.	H. C. N. Johnston
Park Ave.	Lands of Agnes Van Winkle.	P. & H. R. R. R.	.....	.....	.....	.....	.....	.....	.....
*Sherman St.	Lexington Ave.	Parker Ave.	1775.00 "	60 "	1600	1800	1000	.....	Patrick McGuire.

* Incomplete.

EXHIBIT "A 1."

Lineal feet of streets or avenues improved by owners of adjoining lands without cost to the City.

NAME OF STREET.	BETWEEN	AND	LENGTH OF STREET.	WIDTH OF STREET.	GRADING, LINEAL FEET.	CURB AND GUTTER, LINEAL FT.	FLAGGING, LINEAL FEET.
Ann St.	William St.	Columbia Ave.	900.00 lin. ft.	60 ft.	.....	900	900
Autumn St.			60 "	60 "	.....	.....	.....
Ascension St.	Passaic Ave.	Pennington Ave.	1000.00	50 "	1000	.....	.....
Ayerigg Ave.	Bloomfield Ave.	River Drive.	4750.00	72 "	.....	.....	.....
High St.	Lafayette Ave.	Ayerigg Ave.	660.00	60 "	.....	.....	.....
Highland Ave.			.....	60 "	.....	.....	.....
Lafayette Ave.	Bloomfield Ave.	Pennington Ave.	1630.00	75 "	.....	.....	1630
Lexington Ave.	Sumner St.	City Limits.	804.00	75 & 80 ft.	.....	.....	.....
Morris St.	N. Y. S. & W. R. R.	Passaic River.	900.00	50 ft.	900	.....	.....
Orchard St.	Westervelt Place	Ascension St.	600.00	50 "	.....	.....	.....
Pennington Ave.	Ayerigg Ave.	Van Houten Lane	1350.00	70 "	1350	.....	.....
Second St.	Monroe St.	N. Y. S. & W. R. R.	720.00	60 "	720	.....	.....
Third St.	"	Sussex St.	800.00	60 "	800	.....	.....
Fourth St.	"	"	800.00	60 "	800	.....	.....

REPORT OF ENGINEERS

—ON—

CONSTRUCTION OF SANITARY AND STORM WATER SEWERS.

———):O:(———

{ OFFICE OF WISE AND WATSON,
{ PASSAIC, N. J., JAN. 1ST, 1891.

HON. CHAS. M. HOWE,

MAYOR OF THE CITY OF PASSAIC, N. J.

SIR :—

In obedience to your request for a report of the progress of the work of constructing the storm water and sanitary or “Waring” sewers during the year ending Dec. 31st, 1890, we hereby respectfully submit the following report, viz. :

In March 1884, the city engaged Col. Geo. E. Waring, Jr., to plan a system of sewers for the city. He reported that the separate system was the proper one for Passaic, and presented plans and profiles in accordance therewith, which were adopted.

Two years ago the city wisely decided to go on with the construction of the system planned by Col. Waring and awarded the contract for the construction of the greater part of the “River Street System” to Mr. Patrick J. Condon.

He at once began work on State Street, but was restrained by the order from Chancellor McGill, issued on the prayer of the Newark aqueduct board. The Chancellor shortly afterwards decided that we could not be prevented from going on with the construction of our sewer system. This decision was appealed from by the Newark authorities, but the Chancellor permitted us to go on with the construction of the sewers, with the understanding that they were not to be used until the matter was decided by the Court of Errors and Appeals. Ordinarily it would have been unwise to have proceeded with the construction of the sewers until the matter had been finally settled, but in this case the system under construction, would—owing to its occupying an elevated area—have

been part of the general system, whether the sewage be permitted to flow into the Passaic River, or disposed of in some other way. At the same time the city decided to construct a storm water sewer in Park Place from the Paterson and Hudson River Railroad to the Passaic River, and awarded the contract to Mr. Patrick McGuire. The construction was begun, but was stopped by the same restraining order which caused a cessation of work on the sanitary sewer. As soon as the restraining order was modified the contractor proceeded with the building of the sewer. In order to provide further for the storm water which, in periods of heavy rain-fall, rushed down Passaic, Bloomfield and Howe avenues, overflowed Main avenue and the Erie Railroad, filled cellars and damaged streets, and subsequently for the purpose of carrying off the surface water and draining the subsoil of the territory between Jefferson street and North Passaic, we were called upon to prepare plans and specifications for a large brick sewer to be built in and through Main avenue, from the Park Place sewer to Sherman Street and for large pipe sewers in Howe and Bloomfield Avenues from Main avenue to Prospect Street.

The first section of this sewer some time ago reached the district, and it has been doing the work, for which it was intended, and now the other sections have reached the territory it was contemplated to benefit.

UNDER DRAINAGE.

In addition to carrying off the surface water as intended, the storm water sewers are successfully underdraining the soil.

"Slants" or "weepers" have been built in the sides of the sewers just above the invert for the purpose of under drainage, and an inspection within a few days shows that these "weepers" are working as desired. It is anticipated that the completion of this sewer to North Passaic will effectually and permanently drain that section, which has for years been looked upon as a menace to the health of the city. During the year, we had extraordinary rain-falls. Before the *completion* of the system, at these periods of excessive rain-falls much adverse criticism upon the storm water sewers was indulged in. Since their completion, however they have worked, and still continue to work in a perfectly satisfactory manner.

CAPACITY OF SANITARY SEWERS.

There seems to be a suspicion in the minds of many of our citizens, that the pipes for the sanitary sewers are of insufficient carrying capacity, that "they ought to be two or three times as large anyway." One can just as certainly injure his feet by having his boots too large as too small. We can have our sewers too large as well as too small. If larger than necessary they do not clean themselves so readily and perfectly, and the cost for flushing, etc., is much increased. An eight inch pipe sewer, with an inclination of one foot in one hundred will in 24 hours discharge 934,740 gallons of sewage. Our population being 13,000, this will be equal to 71 9-10 gallons per capita. The same size of pipe sewer with an incline of 2 per ct. or 2 feet per hundred, will in 24 hours discharge 1,333,800 gallons of sewage; this is equal to 102 6-10 gallons per capita, taking our present population as a basis. But instead of one eight inch sewer to serve our whole city, we have practically 17 sewers of that size. Again, we have given two examples from sewers of low grade. Most of our sewers have grades above 4 per ct. and some of them as high grades as 10 per ct.

The greater the inclination of the sewer the greater the velocity of the flow, and consequently the greater its capacity.

STREET MONUMENTS.

In the construction of the sewers all monuments which have been located at the intersections of the streets, have been disturbed. We have taken careful measurements of their locations made records of the same for future location. In the re-location it will be well to follow the latest and best practice, and place them within the curb lines in the street corners.

FLUSHING OF SEWERS.

In the contract recently made with the Acquackanonk water company provision is made for supplying the flush-tanks of the small pipe system with water for flushing purposes. Allowing the tanks to fill and empty themselves automatically twice each 24 hours, this will require about 834 gallons per tank per day or for the whole system so far as now contemplated 68,000 to 70,000 gallons.

Appended will be found exhibits " B " and " C " giving lineal feet of sewers constructed during the year 1890 and also plans of the various details of the construction of the sewer.

Respectfully,

COLIN R. WISE.

ROBERT M. WATSON.

Eng'rs in charge of sewers.

EXHIBIT "B."

Lineal feet of storm water sewer constructed during the year 1890.

NAME OF SYSTEM.	LOCATION.	LENGTH OF SEWER.	SIZE OF SEWER.	MATERIAL & SHAPE.	No. of Basins.	No. of Manholes	NAME OF CONTRACTOR.
Park Pl. Sewer.	P. & H. R. R. R. to River.	877.80	3 ft. 3 in. x 4 ft. 10½ in.	Brick, egg shaped.	3	3	P. McGuire.
Main Ave.	P. & H. R. R. R. to Jefferson St.	1437.00	3 ft. 3 in. x 4 ft. 10½ in.	Brick, egg shaped.	7	7	P. T. Plunkett.
*Main Ave.	Jefferson St. to Sherman St.	1020.00	3 ft. 3 in. x 4 ft. 10½ in.	Brick, egg shaped.	4	5	McKiernan & Bergin.
*Main Ave.	Jefferson St. to Sherman St.	1285.00	2 ft. 8 in. x 4 ft.	Brick, egg shaped.	10	8	" "
Howe Ave.	Main Ave to Prospect St.	108.00	20 in.	Vitrified Pipe Cir.	4	1	" "
*Bloomfield Ave	Main Ave. to Prospect St.	213.00	20 in.	Vitrified Pipe "	3	1	" "

* Incomplete.

EXHIBIT "C."

Lineal feet of sanitary sewers constructed during the year 1890.

NAME OF SYSTEM.	LOCATION.	LENGTH OF SEWER	SIZE OF SEWER.	MATERIAL.	NUMBER OF FLUSH TANKS.	NUMBER OF MANHOLES.	NAME OF CONTRACTOR.
River St. System	First and Fourth Ward.	2689	8 in.	Vitrified Pipe.	4	3	P. J. Condon.
*Central System.	Second and Third Ward.	450 (2500 24000)	20 " 18 " 8 "	" "	3	39	McKiernan & Bergin.
†Passaic st sewer	First and Fourth Ward.	796	8 "	" "	1	3	P. T. Plunkett.
*Main Ave.	First and Fourth Ward.	1500	8 "	" "	1	5	" "
*Island System.	First Ward.	4800	8 "	" "	..	..	" "
*Tail race system	Fourth Ward.	3000	8 "	" "	..	...	McKiernan & Bergin.

* Incomplete. † 8 in. Subsoil pipe laid under sanitary sewer.

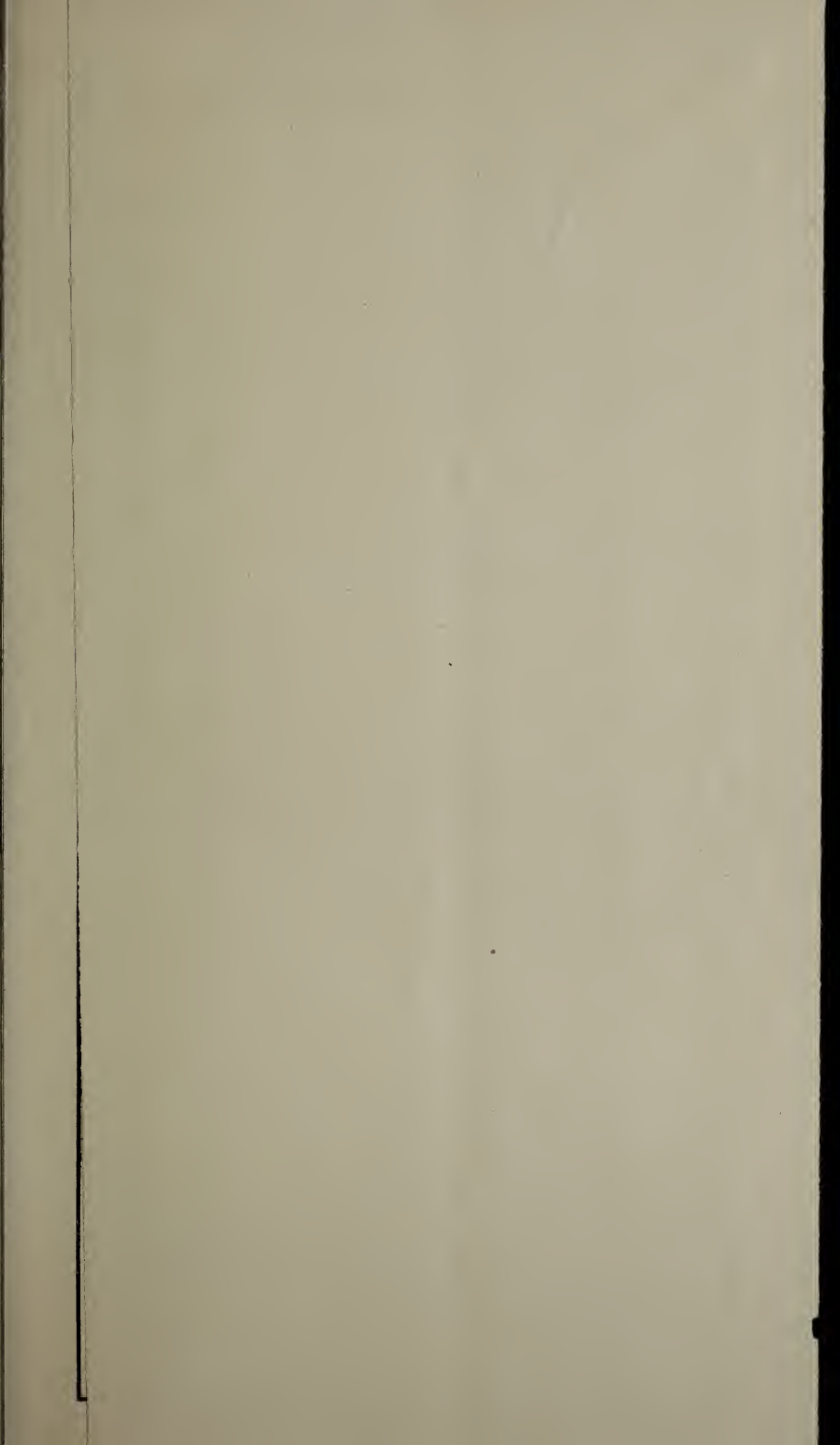


EXHIBIT "C."

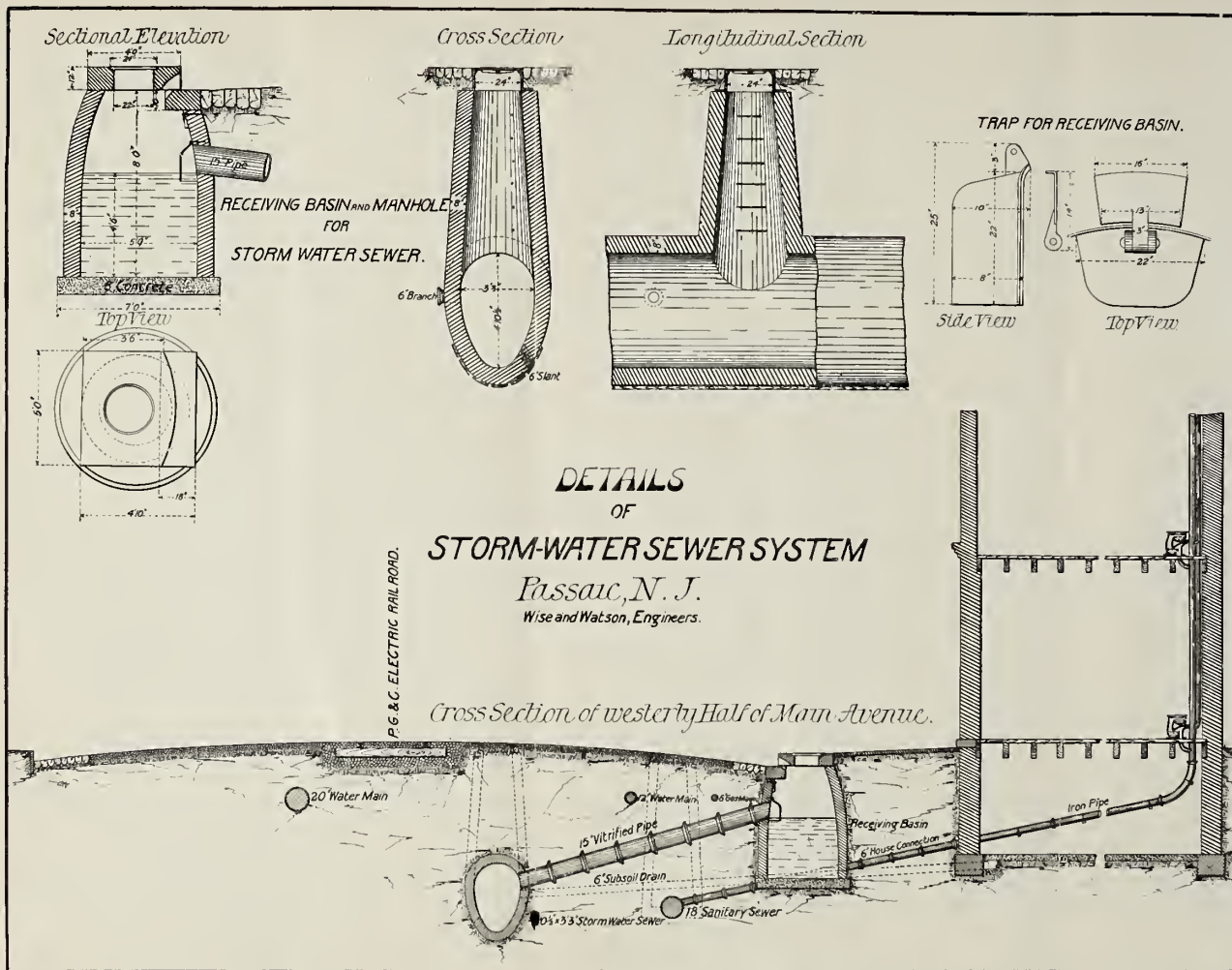
Lineal feet of sanitary sewers constructed during the year 1890.

NAME OF SYSTEM.	LOCATION.	LENGTH OF SEWER	SIZE OF SEWER.	MATERIAL.	NUMBER OF FLUSH TANKS.	NUMBER OF MANHOLES.	NAME OF CONTRACTOR.
River St. System	First and Fourth Ward.	2089	8 in.	Vitrified Pipe.	4	3	P. J. Condon.
*Central System.	Second and Third Ward.	(450 2500 24000	(20 " 18 " 8 "	" "	3	39	McKiernan & Bergin.
†Passaic st sewer	First and Fourth Ward.	796	8 "	" "	1	3	P. T. Plunkett.
*Main Ave.	First and Fourth Ward.	1500	8 "	" "	1	5	" "
*Island System.	First Ward.	4800	8 "	" "	..	..	" "
*Tailrace system	Fourth Ward.	3000	8 "	" "	..	...	McKiernan & Bergin.

* Incomplete. † 8 in. Subsoil pipe laid under sanitary sewer.

Lineal feet of sanitary sewers constructed during the year 1890.

EXHIBIT C. C.

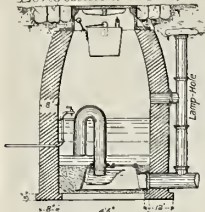


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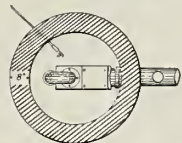
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Van Frankens Flash Tank.

Longitudinal Section.



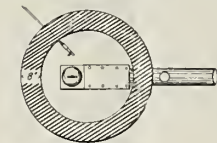
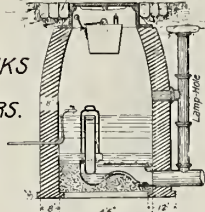
FLASH-TANKS
ON
PIPE SEWERS.



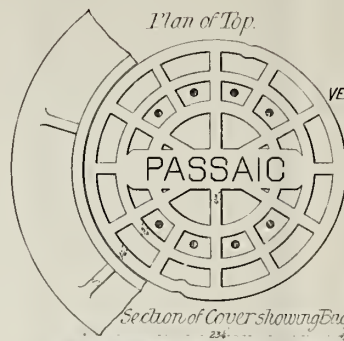
Horizontal Section.

Field Wiring Flush Tank

Longitudinal Section



Horizontal Section



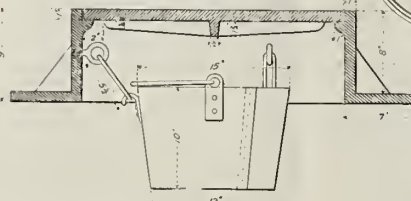
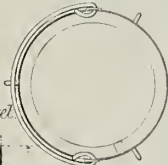
Plan of Top

CATCH-BUCKET

UNDER

VENTILATED MAN-HOLE COVER
AND
FLASH-TANK COVER

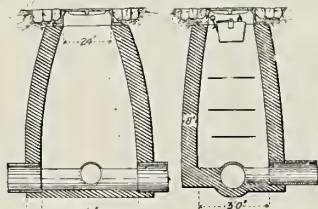
Plan of Bucket



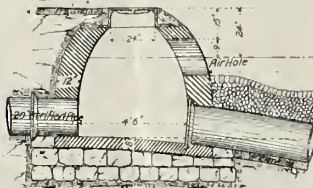
Section of Cover showing Bucket

MANHOLE ON PIPE SEWERS

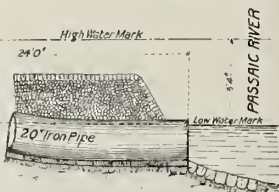
Longitudinal Section. Cross Section.



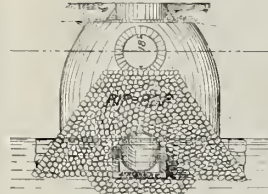
Longitudinal Section



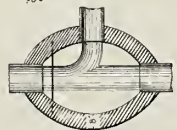
OUTLET IN RIVER



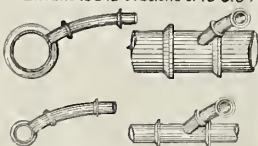
Front View



Elevations and Sections of 18" & 8" Pipes and Branches.



Horizontal Section



DETAILS

OF

PIPE SEWER SYSTEM

Passaic, N.J.

Wise and Watson, Engineers



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